



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,398	01/17/2002	Subramanya P. Rao	010478	1283
23696	7590	07/03/2006		EXAMINER
QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121			NGUYEN, THUAN T	
			ART UNIT	PAPER NUMBER
			2618	

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/053,398	RAO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	THUAN T. NGUYEN	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 11,12,14,15,17,18 and 20-31 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 11,12,14,15,17,18 and 20-31 is/are rejected.
- 7) Claim(s) 26-28 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 January 2002 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____ .

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicants cancel claims 1-10, 13, 16, and 19 without prejudice; and applicants elect Group IV, claims 11-12, 14-15, 17-18 and 20-31 (which are added) for reconsideration.

### ***Claim Objections***

2. Claims 26-28 are objected to because of the following informalities: they are dependent to canceled claim 1. Appropriate correction is required.

### ***Claim Rejections - 35 USC 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --*

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 11-12, 14-15, 17-18 and 20-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown et al. (U.S. Patent No. 6,650,694 B1).

Regarding claim 11, Brown teaches a method of performing a plurality of segmentable search tasks in a single searcher comprising interrupting a first search task in progress, storing state information for the first search task, performing a second search task; accessing state information for the first search task; and continuing the first search task using the accessed state information, i.e., multitasking is performed at the CCP 100 (col. 1/lines 45-61 for CCP 100; and col. 6/lines 35-64 for multitasking machine) and different search tasks are identified and distinguished by IDs in index, and interrupting can be occurred on an individual basis and state

information or statuses of each tasks is stored in a memory, as in col. 2/lines 12-31, and the host processor manages and controls all the event tasks, (refer to col. 23/line 20 to col. 24/line 31 within a CDMA searcher).

As for claim 12, this claim is similar to claim 11 above, with the step of selecting a first storage element for storing partial results and state information for the first search task and similarly, for the second search task is also taught by Brown (refer to col. 2/lines 12-31 again for partial correlation results stored in the memories).

(Claim 13 was canceled).

As for claims 14-15, these processor readable media claims with same features as noted earlier in claims 11-12 are rejected for the reasons given in the scope of claims 11-12 above.

(Claim 16 was canceled).

As for claims 17-18, Brown teaches a single searcher for performing a plurality of segmentable search tasks as cited earlier in claims 11-12 (CCP 100 is the single searcher, refer to col. 6/lines 35-42).

(Claim 19 was canceled).

As for claim 20, Brown teaches an apparatus comprising two or more storage elements that store state information associated with two or more search tasks (refer again to col. 6/lines 34-63).

As for claims 21-25, Brown teaches more than two or more search tasks are performed within a searcher CCP 100, either a non-coherent or coherent accumulator, partial accumulations from which are stored in ones of the two or more storage elements, col. 2/lines 12-43, and a peak

Art Unit: 2618

detector and a sorter for detecting and finding a slot for storing state information (col. 23/line 39 to col. 24/line 31 by using including finger ID, DPE search ID, LCI search ID and SSC ID).

As for claims 26-28, Brown also teaches these features as a processor connected to the two or more storage elements, operable to load and retrieve state information therefrom; and the storage elements are either located in a RAM (temporary memories are used, see col. 2/lines 19-30, or in banks of registers (col. 11/line 63 to col. 12/line 13 for FIFO registers).

As for claims 29-31, Brown further teaches these method claims with similar features as in claims 11-12 now with methods of partitioning a first search task into a plurality of search segments, and the length of time to process each segment being less than or equal to a contiguous segment of time allotted for processing the first task and performing a plurality of alternate search tasks and the time being processed between the processing of ones of the plurality of search segments of the first search tasks (col. 21/line 63 to col. 22/line 22).

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Siram (in PTO 892 attached) disclose a system related to CDMA searcher and methods.

6. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to the New Central Fax number:**

(571) 273-8300, (for Technology Center 2600 only)

Hand deliveries must be made to Customer Service Window,  
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Art Unit: 2618

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (571) 272-7895. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Division or Art Unit 2618.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TONY T. NGUYEN  
PATENT EXAMINER

Tony T. Nguyen  
Art Unit 2618  
June 19, 2006